

**Publisher**<http://jssidoi.org/esc/home>

---

**ASSESSMENT OF INVESTMENT RETURNS THROUGH THE PRISM OF INVESTMENT STRATEGIES: COMPARISON OF PERFORMANCE OF THE MOST SUCCESSFUL INVESTORS AND THE SLOVENIAN FUNDS****Ema Peternel<sup>1</sup>, Vladimir Bukvič<sup>2</sup>**<sup>1</sup> *University of Ljubljana, Faculty of Economics, Ljubljana, Slovenia,*<sup>2</sup> *GEA College Faculty of Entrepreneurship, Ljubljana, Slovenia**E-mails:*<sup>1</sup> [ema.peternel@gmail.com](mailto:ema.peternel@gmail.com); <sup>2</sup> [vladimir.bukvic.ce@gmail.com](mailto:vladimir.bukvic.ce@gmail.com)*Received 11 June 2024; accepted 28 September 2024; published 30 December 2024*

**Abstract.** In this paper, the authors analyze the investment philosophies and strategies of three financial mogul companies to find out what strategies they apply, yielding high returns. They also analyze their performance compared to Slovenian mutual funds and the broader stock market. The authors focus on some key research hypotheses. First, they are interested in assessing and monitoring the company's future intrinsic value, which refers to a fundamental, objective value contained in a financial asset. If the market price is below this value, this financial asset may be a good buy, or if it is above, it may be a good sale. While studying the investment strategies, they check if such an assessment enables above-average investment returns. Second, the authors state that the fund's profitability and risk reflect the chosen investment strategy. Investors generally expect higher returns from riskier investments. Risk tolerance is one of the critical factors determining the return on investment. Typically, higher-risk investments have the potential for higher returns, but they also come with a greater risk of loss. The authors compare and test how the risk is embedded in the investment strategies of three renowned financial investors and Slovenia mutual funds. Third, the authors hypothesised that time and patience are among the most critical factors in investing. The authors' fourth research hypothesis relates to the question if the stock market always accurately reflect the value of individual companies. Many researchers today argue that some market participants behave irrationally, what leads to market inefficiency. They suggest that the financial market can never be perfectly efficient. In the theoretical part of the paper, the authors begin with a brief literature overview underlying how different factors affect investment returns, especially focusing on the indicator ROI. Further, they shortly represent the investment strategies of Buffett, Ackman, and Palihapitiya. In the empirical part of the paper, they perform some financial calculations — annual return, average annual return, annual standard deviation, Sharpe ratio, and then proceed with a Monte Carlo simulation and a CAPM model. The author's findings show that a deep understanding and accurate assessment of a company's intrinsic value leads to above-average returns. The risk and return of a fund are tied to the strategy chosen, with those willing to accept a higher risk often achieving higher returns. They underline the importance of time and patience in investing and observe that the stock market does not always reflect the exact value of an individual company accurately, which emphasizes the importance of critical judgement and not blindly following market trends.

**Keywords:** influential investors; market efficiency; stock market; intrinsic value; company valuation

**Reference** to this paper should be made as follows: Peternel, E., Bukvič, V. 2024. Assessment of investment returns through the prism of investment strategies: comparison of performance of the most successful investors and the Slovenian funds. *Entrepreneurship and Sustainability Issues*, 12(2), 31-52. <http://doi.org/10.9770/e4338524934>

**JEL Classifications:** G14

## 1. Introduction

The process of making investment decisions entails a cognitive assessment that involves choosing one alternative from a range of options based on available information. Given the highly competitive global business

environment, investors are compelled to thoroughly study and develop their intuition to make informed investment choices.

The efficient market hypothesis states that stocks are always traded on stock exchanges at their fair value, which means that investors cannot buy undervalued stocks or sell them at inflated prices. Although the hypothesis establishes the foundation of modern financial theory, it is highly controversial. Proponents of the hypothesis argue that it is pointless to look for undervalued stocks or try to predict market trends through fundamental or technical analysis. The hypothesis states that without insider information, no one can generate risk-adjusted excess returns consistently enough. Thus, it seems that the only real approach to achieving higher returns is to invest in riskier investments (Downey, 2023). Despite this, financial moguls like Warren Buffett, Bill Ackman and Chamath Palihapitiya consistently manage to achieve returns that exceed the market average. We wonder what the secret of their success is.

The aim of the paper is to study and present the investment philosophies and methods of three globally recognized investors — Warren Buffett, Bill Ackman and Chamath Palihapitiya. We examine their philosophies and approaches to investing to better understand what is behind their success. Theoretical concepts are supported by empirical data and case studies. As part of the research, we conducted three case studies that were not included in the article due to their limited scope (Buffett, 2013; Canadian Pacific, 2012; Greenslade, 2014; Sheetz, 2021; USSEC, 2019; Dinner, 2023; Virgin Galactic, 2019, 2022a, 2022b, 2023). The following investments were discussed: Buffett's investment in The Washington Post, Ackman's investment in The Canadian Pacific Railway, and Palihapitiya's investment in Virgin Galactic. These case studies were key to understanding the decision-making processes behind each investment made. A more detailed discussion of the studies is available in the author's thesis (Peternel, 2023). In the research, we conducted a comparative analysis, comparing the financial indicators of Berkshire Hathaway and Pershing Square with the returns of the S&P 500 index and the selected Slovenian mutual funds. On the basis of a financial analysis, we prepared the calculations necessary for the comparative analysis. We obtained the data from the Yahoo Finance and Slovenian mutual funds databases. An important part of this paper is the Monte Carlo simulation, which enables the modelling of potential returns from continuous annual investments in Pershing Square, Berkshire Hathaway, the S&P 500 index and the selected Slovenian mutual funds. Using the CAPM model, we estimated the expected returns of Pershing Square, Berkshire Hathaway, the selected Slovenian mutual funds and the S&P 500 index in terms of their systematic risk, expected market return and risk-free rate of return.

With this paper, we want to determine whether and to what extent the principles and philosophies of the selected investors influence their investment decisions, whether the selected mutual funds exceed the return of the S&P 500 index and, if so, we aim to analyze the factors that contributed to their higher return, how the investment strategies are reflected in the profitability and risk of the fund, what is the profitability of the selected American funds compared to the selected Slovenian funds and, last but not least, what influence do knowledge and tracking of the intrinsic value of the company have on the final investment profitability.

## 2. Theoretical Background

The terms "investments" and "investing," which can be found in almost all economic sectors and, of course, also in the field of social activities, are closely related to the preservation, reduction or expansion of consumption. Investment plays a major role in the expansion of both personal and social consumption and in the increase or decrease in the economic growth of any national economy (Bukvič, 2023).

Investment refers to the act of allocating capital with the expectation of generating a rate of return in the future. Besides looking to increase the wealth of the shareholders, which mainly falls within the frame of the value-based management theory (Bukvič, 2016), investors have to consider some other aspects which are also becoming very relevant and deal with social responsibility. This implies a so-called impact investing, which is defined as the deployment of funds into investments that generate a measurable and beneficial social or environmental impact alongside a financial return on investment. An innovative way of boosting the private sector's contribution to sustainable development can be achieved with impact investing.

The purpose of investing is to direct current financial resources into various forms of real or financial assets to achieve expected returns in the future. Here, we collide with the concept of uncertainty. The longer the period to which the investment relates, the greater the uncertainty regarding the generation of future returns. It accordingly follows that time and uncertainty are extremely important investment dimensions. We make an investment decision today and reap its results (the expected returns) in the future. If the investment decision is not considered enough, the future consequences can be very painful for the investor, even fatal (failed investments as a result of wrong investment decisions). Therefore, when making investment decisions, information that can help form a vision about the certainty of the investment's status in the future is very important.

Serious investors, i.e. companies in the real sector of the economy, various organizations in the field of social activities, individuals, "venture" capitalists (blue angels), and financial institutions such as banks, funds, etc., undertake investments in a prudent manner. This means, among other things, that they try to check and evaluate the economic benefits of their planned investments before making investment decisions. For this purpose, they use a wide variety of investment criteria, giving preference to those that also consider the temporal aspect. The most widespread among dynamic investment criteria is net present value.

The other one is return on investment, ROI. It can be confused with the profits of an investment. The key distinction between profits and ROI is that ROI is concerned with the money investors invest and the investment returns they receive based on the business's net profit. Profit is a metric used to assess a company's performance (Quanloop team, 2024).

Most investors will be looking for investments with the highest ROI, even though they should consider other factors, like dispersion of ROI and adjusting it with time. The ROI is a tool used to calculate the rates of return on money invested to determine whether or not to invest. Measuring ROI allows investors to assess the performance of different assets in an investment portfolio. A high ROI means that their returns are higher than the cost of the investment. A lower ROI would mean the opposite. Several factors influence ROI and cause its fluctuations. As the simplest form of returns measurement in percentage, ROI aids in the selection of various investment possibilities. As an investment grows, so does the importance of its ROI. The investors track their ROI and compare the return patterns. Positive or negative ROI will help investors determine whether to hold onto that investment or adjust it to the market.

In this context, we study the investment strategies of three globally recognized investors, i.e. Warren Buffett, Bil Ackman and Chamatha Palihapitiya, and compare their investment returns to Index S&P 500 and some Slovenian mutual funds.

### **1.1 Warren Buffett's Investment Strategy**

In order to effectively manage Berkshire Hathaway and its investments, Buffett wrote twelve principles in a 2013 letter to the company's shareholders, which are classified into four main groups: 1. Business principles, 2. Management principles, 3. Financial principles and 4. Market principles. In summary, the short-term performance of an investment does not mean that the portfolio managers are good or bad. The period in which we measure the ability to generate returns is simply too short to draw any meaningful conclusions. However, if we look at the company's operating results, we can assess progress when the share price deviates from expected returns. Buffett emphasizes that the key to a successful investment is a competitive advantage and a favourable price compared to the internal value (margin of safety) (Klarman, 1999; Buffett, 1985; Buffett, 2014; Hagstrom, 2014).

### **1.2 Bill Ackman's Investment Strategy**

Bill Ackman is a hedge fund manager and investor known for his use of activist investing (Dallas, Bainbridge and Bohinc, 2001). Ackman's activist investment approach is based on acquiring large stakes in undervalued companies through his hedge fund Pershing Square Capital Management. It works with the management of these companies to drive change that can increase shareholder value. Changes can be reflected in operational

improvements, reallocation of capital, or in the restructuring of the management team. Ackman often expresses his opinion publicly. He prepares presentations or writes open letters to the company's stakeholders in which he explains his investment strategy (Tenorio, 2021).

### **1.3 Chamatha Palihapitiya's Investment Strategy**

Chamath Palihapitiya focuses on investing in high-tech companies with high growth and transformation potential. He looks for opportunities in undervalued companies with long-term competitive advantages. His strategy focuses on making unconventional decisions that deviate from market trends, thorough data analysis, and trust in management with a proven ability to lead and make decisions effectively. He believes in the power of technology to solve social problems and promotes companies that have a positive impact on society. He supports ethical behaviour, transparency and socially responsible investing. Issues of diversity, equality and inclusion are also of critical significance. As the co-founder of Facebook, he promotes a form of capitalism where success is measured not only by profit but also by social impact (Dure, 2023).

### **1.4. Differences in Strategies**

The main differences between the selected investors' strategies lie in risk tolerance, time horizon, and level of involvement with the companies they invest in. Buffett is highly conservative, focusing on long-term investments with minimal risk. He is a passive investor and takes a "buy and hold" approach. Conversely, Ackman is more moderate in terms of risk but highly tactical. He often accelerates turnarounds through active engagement and driving corporate changes. Out of the three Palihapitiya takes on the riskiest investments, primarily focusing on tech-centric start-ups with high growth potential. Like Ackman, he is involved in the companies he invests in, focusing on shaping them for long-term growth.

### **1.5. Literature Review: How Different Factors Affect Investment Returns**

In traditional finance, investors are assumed to behave rationally while making financial decisions. In contrast, proponents of behavioural finance argue that investors are not always rational. The financial decisions they make and their investment performance are influenced by various behavioural factors. So, the literature is filled with a plethora of studies on finding the impact of behavioural factors on decision-making and investment performance. A group of researchers (Uzma et al., 2024) tried to determine whether psychological, market, social, and financial literacy impact investment performance while testing the mediating role of decision-making. Interestingly, the results of their study are persistent with the prospect theory and assert that investors do not always make rational judgments when making financial investments.

Mutswenje (2009) confirmed that there seems to be a certain degree of correlation between the factors that behavioural finance theory and previous empirical evidence identify as the average equity investor. He found out that the most important factors that influence individual investment decisions were the reputation of the firm, the firm's status in the industry, expected corporate earnings, profit and condition of statement, past performance of firm stock, price per share, feeling on the economy and expected dividend by investors.

Media can also be an influential factor affecting investment returns. The rapidly increasing scientific research on the stock market and the visible impact of media on equity prices are in the limelight. To a greater extent, causal analysis can reckon the sentimental effect of the broadcasted content on stock valuation. Renju and Biju (2023) carried out a study that perfectly identifies the deluge of information during quick leaps, and it is regarded as a beneficial formulation for investors when evaluating stocks with fewer news mentions. Their study also infers an explicit information flow and direction of causality between news sentiment and stock price movement, which can be used to devise future investment and consumption strategies.

The findings of the analysis carried out by Mulyadi, Zulkifli and Widyastuti (2023) reveal that financial literacy have negative effect on investment decisions. Conversely, financial behaviour, risk reception, and overconfidence have positive effects on investment decisions. Additionally, risk perception have positive effect on organizational performance. However, financial literacy, financial behaviour, overconfidence, and

investment decisions have no effect on organizational performance. Consequently, it can be inferred that all factors influencing investment decisions have the capacity to influence organizational performance.

Relating to impact investing, Jeffers, Lyu and Posenau (2024) provided an analysis of the risk exposure and consequent risk-adjusted performance of impact investing funds, private market funds with dual financial and social goals. Adding a public sustainability factor to their pricing model helps explain the impact of fund returns. However, the correlation of impact fund cash flows with the public sustainability factor on its own is not necessarily positive.

Return on Investment (ROI) is the most crucial aspect of choosing between a good investment strategy and a bad one. Earning great ROI returns is the ultimate goal of stock market investment. There are several factors determining the return on investment of an asset class or a fund. Bhatia (2023) introduced the top ten factors that contribute to the success of an investment strategy: investment type, time horizon, risk tolerance, market conditions, diversification, investment costs, economic conditions, taxation, monitoring and rebalancing and performance evaluation. Let us expose only the last one. According to Bhatia, keeping track of how the investments are performing is vital for making informed decisions. Investors should assess their investments based on their historical performance, market conditions, and their financial goals. If an investment consistently underperforms or no longer aligns with the objectives, it may be time to consider selling or reallocating those assets. Effective performance evaluation allows investors to make adjustments that can positively impact the factors determining the return on investment.

For the purpose of our research, where we are trying to assess the investment returns through the prism of investment strategies of the most successful investors, we are focusing on the following factors.

#### *Market Conditions, Intrinsic Value and Market Efficiency*

Market conditions are dynamic and have a direct impact on the factors determining the return on investment. Economic factors, geopolitical events, and market sentiment all influence the performance of investments (Bhatia, 2023). For example, most investments tend to perform well during a bull market, leading to higher ROIs. On the other hand, during a bear market or economic recession, investments may struggle, resulting in lower returns. Awareness of current market conditions and adjusting the investment strategy accordingly is essential for optimizing ROI.

Intrinsic value refers to a fundamental, objective value contained in an object, asset, or financial contract. It may be a good buy if the market price is below this value or a good sale if it's above it. There are several methods for arriving at a fair assessment of a share's intrinsic value. Intrinsic value is fundamental for value investing, a strategy established by Benjamin Graham and popularized by Warren Buffett. Scholars emphasize that the stock market does not always reflect a company's true value (Hagstrom, 1999; Greenblatt, 2010). The efficient market hypothesis (EMH) states that securities markets are highly efficient in reflecting all available information about individual stocks as well as about the stock market as a whole (Fama, 1970). However, the accuracy of EMH is difficult to test. Many authors today argue that, while some market participants behave irrationally – leading to market inefficiencies - such pricing irregularities are present in the short term. They suggest that the market can never be perfectly efficient as there would be no incentive to uncover new information, which is then reflected in market prices (Malkiel, 2003).

The recent underperformance of value investing strategies in equity markets has sparked debate about their continued relevance. Several criticisms of value investing have been raised, such as increased share repurchasing, monetary policy changes, oversimplified value measures and the rise of intangible assets, which makes it harder to assess a company's value using traditional accounting. A recent study evaluated these criticisms but found little empirical evidence to support them (Israel, Laursen and Richardson, 2020). Existing literature, however, lacks studies on how modern strategies, such as Bill Ackman's activist investing or Chamath Palihapitiya's tech-driven strategy, evaluate intrinsic value in fast-moving industries.

*Returns and Risk of Investments: The Eternal Dilemma of Investors*

Risk and return are inherently linked, as supported by the modern portfolio theory (Markowitz, 1952) and the Capital Asset Pricing Model (CAPM) (Lintner, 1965; Sharpe, 1964). Investors generally expect higher returns from riskier investments. According to Bhatia (2023), risk tolerance is one of the critical factors determining the return on investment. It defines investors' ability and willingness to endure the ups and downs of the investment market. Generally, higher-risk investments have the potential for higher returns, but they also come with a greater risk of loss. Investors with a high-risk tolerance may opt for aggressive growth strategies, such as investing in emerging markets or startups. Conversely, investors with a low-risk tolerance may prefer more conservative options like bonds or real estate. It's important to align their risk tolerance with their investment choices, as it plays a significant role in determining the return on investment.

The risk is not the same for all investors. Different investors take different risks. We are talking about risk appetite. Risk appetite is the degree of broad-based risk that an investor is willing to accept in pursuit of their strategic goals. Risk appetite reflects the risk management philosophy an investor wants to adopt and consequently influences their risk culture, way of operating and decision-making (The Global Fund, 2018). Regarding a low-risk investment, the return is generally low as well. Similarly, high risk brings with it the possibility of high losses. Therefore, investors should diversify their portfolios. Diversification of investments has a statistical effect in terms of reducing overall risk. Investors, especially beginners, are often advised to diversify their portfolio (Bukvič, 2024). Both Ackman's and Palihapitiya's investment strategies align with this approach, as they take on moderate to high-risk investments with the expectation of high returns. While much of the literature covers traditional risk-return frameworks, less attention is given to the fundamentals of a business. Models such as CAPM and the beta coefficient focus too heavily on market prices, failing to consider specific business fundamentals or broader economic developments. One could argue that risk is less about market price volatility and more about an investor's understanding of the underlying business and its long-term potential.

*Macroeconomic Factors*

Stock markets are greatly affected by macroeconomic conditions. Economic indicators, such as inflation rates, interest rates, and GDP growth, are vital in determining the return on investment. These indicators can affect the value of the investments, the cost of borrowing, etc. For example, high inflation rates can erode investors' money's purchasing power, making it essential to invest in assets that outpace inflation. On the other hand, low interest rates can make borrowing cheaper, potentially boosting the return on investment for leveraged strategies. As Bhatia (2023) says, staying informed about economic indicators is essential for making informed investment decisions. Many studies have investigated the link between macroeconomic variables and stock market volatility (Fama, 1990; Binswanger, 2000; Ozlen and Ergun, 2012). Certain unfavourable macroeconomic conditions, such as slow growth combined with rising inflation, high volatility or illiquidity, make it difficult for assets to generate long-term returns. Different asset classes respond differently to these factors. For example, stocks tend to do well during periods of growth, while bonds may perform better during economic downturns (Ilmanen, Maloney, and Ross, 2014). Extreme situations, such as the COVID-19 pandemic, can have serious negative impacts on stock market returns. A 2022 study on the global stock markets during COVID-19 found a decrease in mean returns and an increase in volatility (Chowdhury, Khan and Dhar, 2022). Existing literature lacks focus on how specific strategies, like Ackman's activist investing, perform under different macroeconomic conditions.

*Interest Rates*

Monetary policy, specifically through interest rate changes, influences the returns on financial assets, affecting their prices. This, in turn, impacts economic decisions and growth. Bernanke and Reinhart (2004) argue that low interest rates, whether current or expected, encourage investments as borrowing money becomes cheaper. Some research, however, suggests that this relationship is small and mostly dependent on inflation rates (Sellin, 2001). A more recent Johansen cointegration analysis showed a long-term equilibrium relationship between stock prices, inflation rates, and real interest rates. The study found that changes in real interest rates and

inflation rates Granger cause significant changes in stock prices. It concluded that real interest rates are positively associated with stock prices, as higher interest rates often indicate stronger economic conditions. Inflation rates, however, are negatively associated with stock prices. The analysis also showed a significant speed of adjustment between stock prices and real interest rates, meaning that when there is a deviation from the long-term equilibrium, the stock prices will adjust relatively quickly (Eldomiaty, Saeed, Hammam and AboulSoud, 2020).

### *Regulation*

Hahn and Hird (1991) were the first to provide a comprehensive analysis of the costs and benefits of federal economic and social regulation. Since then the macroeconomic effects of regulation have been widely studied (Goff, 1996; Dawson and Seater, 2013). Regulations help maintain market safety and stability and protect consumers, but often at the cost of lower profits for businesses. Regulation imposes a significant cost on firms (Ince and Ozsoylev, 2024). Businesses also face regulatory risk, which refers to the potential changes in laws, regulations, or government policies that could adversely affect a company's operations or profitability. This is particularly relevant for investors like Palihapitiya, who focuses on high-growth and emerging sectors like technology and space travel, where regulatory shifts can significantly impact a company's long-term prospects.

### *Taxation*

Taxes can have a significant impact on investors' ROI. How investments are taxed can vary depending on factors like investors' location and the type of investment. Understanding the tax implications of the investments is crucial to maximizing the after-tax return on investment. For example, long-term capital gains are often taxed at a lower rate than short-term gains. Additionally, certain investments, like municipal bonds, may offer tax-free interest income. Bhatia (2023) asserts that by strategically managing investors' tax liabilities, they can improve the factors determining the return on investment. Understanding how the investments are taxed is critical to ROI fluctuations. The government taxes all incomes, and investment income is no exception. Taxes also depend on the country since both income tax and capital gains tax may be lower in those countries, and in some countries, there may be no capital gains taxes. Some countries will give tax breaks on investments to boost investors' portfolios. Once the investors know the real rate of taxes and any tax benefits, they can decide where to allocate their investments to maximise their ROIs.

## **2. Research Methodology**

With our research, we set the following research hypotheses:

*H1: Proper assessment and monitoring of the company's future intrinsic value enables above-average investment returns.*

*H2: The fund's profitability and risk are a reflection of the chosen investment strategy. Investment funds that are willing to take on more risk often aim for higher returns, while more conservative funds aim for lower but more stable returns.*

*H3: The most important factors in investing are time and patience.*

*H4: The stock market does not always accurately reflect the value of an individual company, so it is important to critically evaluate every decision and not blindly follow market trends.*

In the theoretical part of the research, we used the scientific method of description as well as the scientific methods of classification, comparison, analysis and synthesis.

In the empirical part of the research, we used statistical methods (arithmetic mean, standard deviation) and analyzed the data using the Sharpe ratio, performed a Monte Carlo simulation and used the CAPM model.

For the research, we used secondary data from the Yahoo Finance database and the Slovenian mutual investment funds databases. The research covers the 2018–2022 period.

### 3. Results and Discussion

#### 3.1 The return on Shares of Two Companies Listed on Global Stock Exchanges

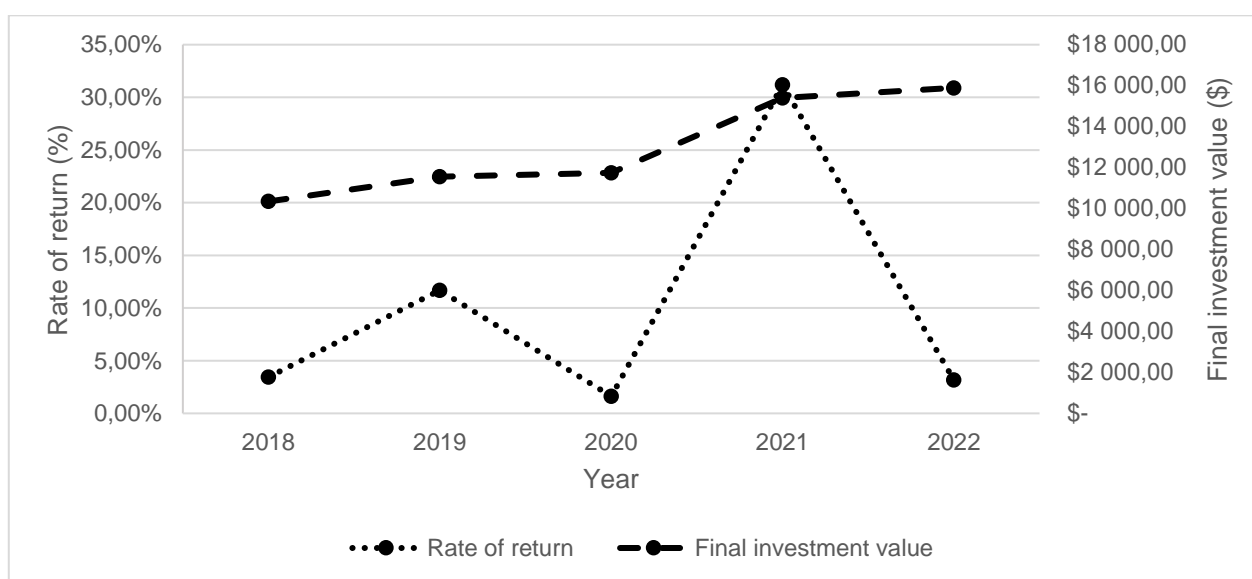
Let's see how a hypothetical \$10,000 investment in Berkshire Hathaway (BRK-A) stock would have grown over the past five years (2018-2022). The calculated values are shown in Table 1.

**Table 1.** Stock prices, returns and value of a hypothetical \$10,000 investment in Berkshire Hathaway stock over the period 2018-2022

Year	Stock price in January (in \$)	Stock price in December (in \$)	Annual return (in %)	Final value of the investment (in \$)
2018	295,755	306,000	3.46	10,346.00
2019	304,057	339,590	11.68	11,554.41
2020	342,261	347,815	1.62	11,741.59
2021	343,525	450,662	31.18	15,402.62
2022	454,300	468,711	3.17	15,890.89

Source: Yahoo Finance (2023a).

Based on the calculations, we find that the investment of \$10,000 in Berkshire Hathaway stock would grow to about \$15,890 in the period between 2018 and 2022. The investment would grow by 59% in five years. Figure 1 shows Berkshire Hathaway's annualized return and the movement of a hypothetical \$10,000 investment in Berkshire Hathaway stock over the 2018–2022 period.



**Figure 1.** Graphic representation of Berkshire Hathaway's annualized return and the performance of a hypothetical \$10,000 investment in Berkshire Hathaway's stock over the 2018–2022 period.

Source: Yahoo Finance (2023a).

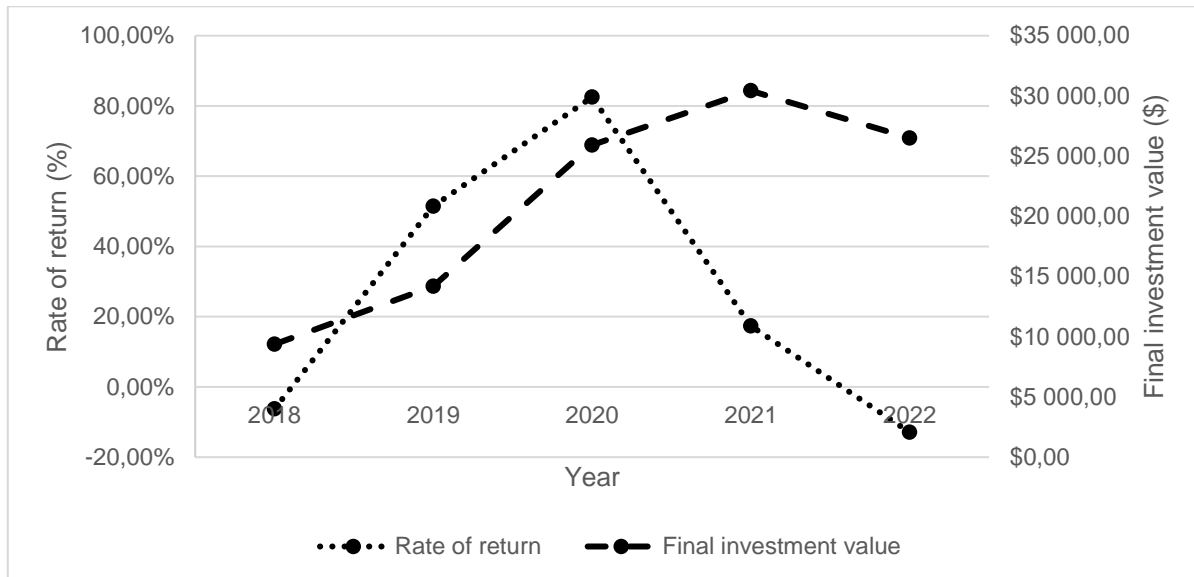
Let's see how a hypothetical \$10,000 investment in Pershing Square Holdings Ltd. (PSH.AS) stock would have developed in the last five years (2018–2022). The calculated values are shown in Table 2.

**Table 2.** Stock prices, returns and value of a hypothetical \$10,000 investment in Pershing Square stock over the 2018–2022 period.

Year	Stock price in January (in \$)	Stock price in December (in \$)	Annual return (in %)	Final value of the investment (in \$)
2018	12.84	12.04	-6.23	9,377.00
2019	12.04	18.24	51.50	14,206.00
2020	18.57	33.89	82.50	25,926.00
2021	34.28	40.23	17.36	30,427.00
2022	39.44	34.35	-12.91	26,500.00

Source: Yahoo Finance (2023b).

A \$10,000 investment in Pershing Square stock would increase to about \$26,500 from 2018 to 2022, a 165% increase. Despite two years of negative returns, the analysis showed a long-term growth trend. Short-term losses do not reflect long-term trends, as high returns in other years more than offset these losses. Although the path has been unpredictable, the company's long-term strategy is successful in uncertain market conditions. Figure 2 shows Pershing Square's annualized stock return and the performance of a hypothetical \$10,000 investment in Pershing Square stock over the 2018–2022 period.



**Figure 2.** Graphical representation of Pershing Square's annualized stock return and the performance of a hypothetical \$10,000 investment in Pershing Square stock over the 2018–2022 period.

Source: Yahoo Finance (2023b).

An analysis of Berkshire Hathaway and Pershing Square's stock returns in the 2018–2022 period highlights the importance of a long-term strategy and patience, which are key for investors. Despite short-term fluctuations and negative returns in some years, high positive returns in other years led to overall investment growth. Pershing Square's stock stood out for its outstanding returns, which more than offset short-term losses. These fluctuations show that the stock market does not always reflect the true value of companies, which requires critical judgment from investors.

*b. Average return on shares of selected companies, mutual funds and the S&P 500 index*

The average return is an indicator that is calculated as the geometric mean of the annual returns in the studied period; it takes into account the effect of compound interest (Thakur, 2023).

We calculate annual returns for the following stocks of companies and mutual funds: Pershing Square, Berkshire Hathaway, NLB Razvita Evropa Delniški (NLB Equity Advanced Europe), NLB Globalni Delniški (NLB Equity Global), TRIGLAV Severna Amerika (TRIGLAV North America), TRIGLAV Evropa (TRIGLAV Europe) and the S&P 500 index.

Among the selected companies and mutual funds, the shares of *Pershing Square (PSH.AS)* achieved by far the highest average annual return during the five-year period under review – 21.74%. Compared to the S&P 500 index, this return is truly impressive. A higher return often comes with a higher risk, which we will explore in greater detail below.

*Berkshire Hathaway (BRK-A)* returns were 9.65% on average over the past five years, outperforming the S&P 500. However, BRK-A lagged Pershing Square by a significant margin. The underperformance of shares (BRK-A) can be attributed to Berkshire Hathaway's long-term and conservative strategy, which focuses on stable companies with strong business models. Such an approach is reflected in market-beating stock prices with

relatively little risk for investors. This strategy may mean lower short-term returns but aims for long-term stability and growth.

*The NLB Razvita Evropa Delniški mutual fund*, which focuses on investments in established European companies and is managed by NLB Skladi (NLB Funds), recorded an average annual return of its unit of property of only 2.40% in the period under review. This return is much lower both in comparison to the shares of Pershing Square and Berkshire Hathaway and even to the average return of the S&P 500 index. This allows us to draw conclusions that the investment strategy of the mutual fund is less successful. However, a lower return does not necessarily mean that a mutual fund or this specific investment is a poor choice for investors. Its long-term profitability is highly dependent on the performance of the European economy. In the following subsection, we will take a closer look at its stability and the size of the risk it assumes.

*The NLB Globalni Delniški mutual fund*, managed by NLB Skladi, achieved an average annual return per unit of 5.07% in the five years under review. The annual return is much better than the return of the NLB Razvita Evropa Delniški mutual fund, but it still does not reach the return of the S&P 500 index. According to the information on their website, the mutual fund is intended for investors who want to invest in a well-diversified global stock portfolio, as it is highly diversified. Although the return of the NLB Globalni Delniški mutual fund is lower than the return of the S&P 500 index, its geographical and sector diversification can be attractive to investors (NLB Skladi, 2023a).

*TRIGLAV Severna Amerika*, a mutual fund managed by Triglav Skladi (Triglav Funds), achieved an average annual return of 8.96%, which exceeds the return of the S&P 500 index but still lags behind the return on shares of Berkshire Hathaway and Pershing Square. The Triglav Skladi website describes the mutual fund as high-risk, so it is important to look at how effectively it creates value relative to the accepted risk (Triglav Skladi, 2023b).

*The TRIGLAV Evropa mutual fund*, managed by Triglav Skladi, achieved the lowest average annual return per unit of all the mutual funds and company shares discussed, namely only 1.36%. TRIGLAV Evropa is a mutual fund that focuses on investments in European companies. However, it seems that the regional focus did not bring the desired results in the period under review. Possible reasons for such a low return could include a weaker economic performance in Europe or a failed investment strategy of the mutual fund. In addition, this mutual fund is considered high-risk, so the low returns are surprising (Triglav Skladi, 2023a).

*The S&P 500 index* achieved an average annual return of 7.33% during the period under review. Investing in funds that track the S&P 500 index is often considered less risky than investing in individual stocks because the index consists of 500 different companies, allowing for greater diversification. However, it is important to emphasize that diversification in itself does not eliminate all investment risks. The S&P 500 index is one of the most commonly used criteria for assessing investment returns and is accepted as a good indicator of the overall performance of the market, so in this part, it will serve as a basis for comparing the performance of the discussed mutual funds and companies.

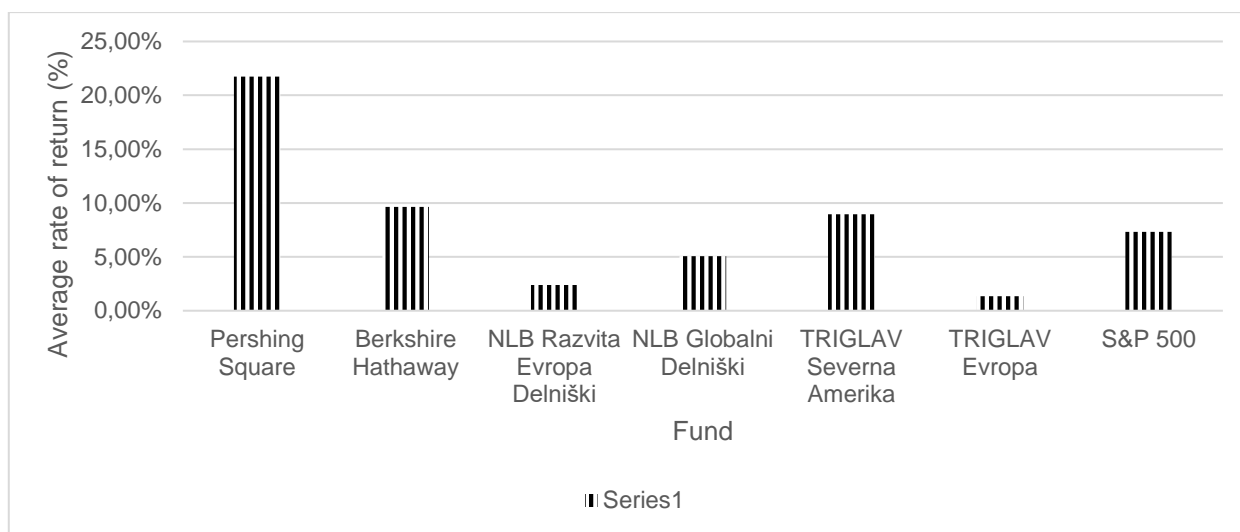
Table 3 shows the average returns on shares of selected companies, unit values of mutual funds and the S&P500 index over the last five-year period.

**Table 3.** Overview of the average annual return of selected mutual funds, company shares and the S&P 500 index in the 2018–2022 period.

Stock, fund, index	Average annual return (in %)
<b>PSH.AS (Pershing Square)</b>	21.74
<b>BRK-A (Berkshire Hathaway)</b>	9.65
<b>NLB Razvita Evropa Delniški</b>	2.40
<b>NLB Globalni Delniški</b>	5.07
<b>TRIGLAV Severna Amerika</b>	8.96
<b>TRIGLAV Evropa</b>	1.36
<b>S&amp;P 500</b>	7.33

Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c, 2023f, 2023g).

Figure 3 shows a comparison of the average annual return of selected mutual funds, company shares and the S&P 500 index for the last five-year period.



**Figure 3.** Graphic representation of the average annual return on shares of selected companies, mutual funds and the S&P 500 index in the 2018–2022 period.

Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c).

The quantitative analysis of the average return on selected mutual funds and shares of the selected companies in the 2018–2022 period reveals complex dynamics that affect the return. Various factors such as investment strategy, geographic focus and accepted risk co-shape returns. Some companies have chosen long-term strategies, which have reflected in stable returns, while others have chosen a more aggressive approach, which has brought higher returns but also higher risk. The geographical focus also affected the returns, as differences in economic conditions and market trends across regions created opportunities and challenges for fund managers. Higher risk has often brought higher returns, but also higher volatility, which was evident in Pershing Square's exceptionally strong stock returns.

### 3.2 The Risk of Investments by Joint-Stock Companies on Global Stock Exchanges and Slovenian Mutual Funds

In the investment world, there is no return without risk. Risk represents the uncertainty about future returns on an investment and is an essential part of understanding and evaluating investments. In this subsection, we focus on a tool often used in financial analyses to measure this risk: the annual standard deviation.

The annual standard deviation measures the dispersion of a data set relative to the mean value of the data. The greater the standard deviation of the securities, the greater the variance between each price and the mean, indicating a greater price range (Hargrave, 2023).

The standard deviation for the S&P 500 index in the 2018–2022 period was 0.219. This value reflects the dispersion of annual returns around the mean, with a higher value indicating greater volatility and a lower value indicating more stable returns. In our case, the annual returns of the S&P 500 index are, on average, in a range of about 21.9%, around the average annual return.

The standard deviation for the *Pershing Square's stock* in the 2018–2022 period was 0.275, which means that the stock's returns moved with a volatility of about 27.5% around its average annual return. The company's stock has performed highly fluctuating annual returns during the period under review, ranging between 82.5% in 2020 and -12.91% in 2022. Based on this, we can say that the investment in Pershing Square's stock is very

volatile, as on the one side it means a high probability of high returns, and on the other side a higher risk, i.e. a high probability of loss.

The standard deviation for the *Berkshire Hathaway* stock of was 0.224 during the period under review, which means that the returns of the stock moved with a volatility of about 22.4% around the average annual return. Since the standard deviation of Berkshire Hathaway's stock is only slightly above the standard deviation of the S&P 500, this indicates a relatively low-risk investment in the company. When you combine this with the fact that Berkshire Hathaway achieved higher returns than average returns in the capital market, and considering its relatively low risk, an investment in Berkshire Hathaway stock appears to be very attractive.

The standard deviation of the units of the *NLB Razvita Evropa Delniški* mutual fund was 0.180, which means that the returns of the mutual fund fluctuated with a volatility of approximately 18% around the average annual return during the period under review. Since this value is lower than the standard deviation of the S&P 500, it can be argued that the mutual fund was less volatile during this period. Lower volatility generally means lower risk as the value of the investment fluctuates less.

The units of the *NLB Globalni Delniški* mutual fund also had a lower annual standard deviation than the S&P 500 index. It was 0.173. This value reflects that the returns of the mutual fund fluctuated with a volatility of 17.3% around the average annual return during the period under review. Yields did not fluctuate excessively, which can be attractive to investors looking for more stable investments. Factoring in the mutual fund's low average yields (5.07%), investors would probably be more interested in an investment that tracks the S&P 500 index.

The *TRIGLAV Severna Amerika* mutual fund recorded a standard deviation of 0.223. This value reflects the volatility of the fund's return, which was approximately 22.3%, around the average annual return. The value is comparable to the standard deviation of the S&P 500, which had a standard deviation of 0.219, and Berkshire Hathaway, which had a standard deviation of 0.224. The mutual fund was very similar to the stock market in terms of volatility. In addition, it managed to realize a slightly higher average annual return (8.96%) than the S&P 500 index (7.33%), thus achieving better results than the stock market.

The standard deviation of the assets of the *TRIGLAV Evropa mutual fund* amounted to 0.172 in the period under review. This value reflects the volatility of the return of the mutual fund, which was approximately 17.2%, around the average annual return. The standard deviation of the mutual fund was lower than the standard deviation of the S&P 500. We can conclude that their returns were more stable and less volatile. The low average annual returns of the mutual fund (1.36%) only confirm the low volatility.

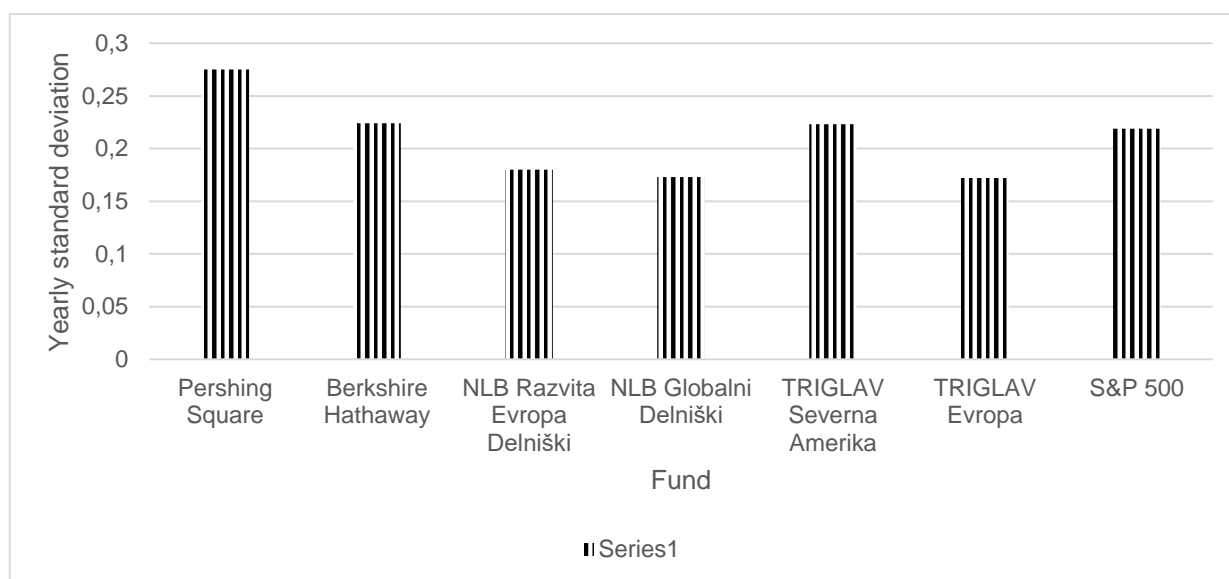
Table 4 shows the investment risks of selected shares of foreign companies and Slovenian mutual funds as well as the S&P 500 index in the considered five-year period.

**Table 4.** Overview of investment risks of selected Slovenian mutual funds, company shares and the S&P 500 index in the 2018–2022 period.

Stock, fund, index	Investment risk expressed in standard deviation
Pershing Square	0.275
Berkshire Hathaway	0.224
NLB Razvita Evropa Delniški	0.180
NLB Globalni Delniški	0.173
TRIGLAV Severna Amerika	0.223
TRIGLAV Evropa	0.172
S&P 500	0.219

Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c, 2023f, 2023g).

Figure 4 illustrates the investment risks of selected shares of foreign companies and Slovenian mutual funds in the period under consideration.



**Figure 4.** Graphic representation of investment risks of selected company shares, mutual funds and the S&P 500 index (2018-2022).  
 Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c).

The analysis of the standard deviation of the shares of the selected companies and the Slovenian mutual funds provided insight into their volatility and risks. The Pershing Square shares showed the highest volatility during the period reviewed, which reflects the high risk, but at the same time brings the potential for high returns, which was presented in detail in the previous two subsections. On the other hand, mutual funds NLB Razvita Evropa Delniški, NLB Globalni Delniški and TRIGLAV Evropa showed a lower standard deviation, which indicates lower risk with more stable returns. We can conclude that the return and risks of the fund and the company's shares are a reflection of its chosen investment strategy. While Pershing Square pursues a strategy focused on achieving high returns, which is reflected in its share price, mutual funds such as NLB Razvita Evropa Delniški, NLB Globalni Delniški and TRIGLAV Evropa chose a strategy that favours lower risk and more stable returns.

### 3.3 Profitability Compared to the Riskiness of Investments of Joint-Stock Companies on Global Stock Exchanges and Slovenian Mutual Funds

#### *The Sharpe Ratio*

The Sharpe ratio is a way of measuring the performance of an investment considering its risk. A higher ratio indicates an investment that provides higher risk-adjusted returns (Fernando, 2023).

For comparison, let's first look at the Sharpe ratio for companies within *the S&P 500 index*. The ratio was 0.24 during the period under review. For every unit of risk assumed, the S&P 500 gained 0.24 units of excess return above the risk-free interest rate. A higher Sharpe ratio means higher risk-adjusted returns, so in this case it can be argued that the S&P 500 performed relatively well compared to the risk taken.

The Sharpe ratio for *Pershing Square* stock was 0.71, which is much higher than the ratio achieved by the S&P 500. We can conclude that the stock has been better adjusted to risk, thus generating better results compared to the capital market. Investing in stocks managed to generate 0.71 units of excess return for every unit of risk assumed. Through analysis, we found that investing in Pershing Square shares has by far the highest average returns, is volatile and therefore riskier. The company's investment policy was riskier, but they managed to manage these risks perfectly, which allowed them to generate a large excess return. Investing in Pershing Square stock turned out to be an excellent choice for risk-averse investors in search of high returns.

The Sharpe ratio for *Berkshire Hathaway* stock was 0.34. The stock generated 0.34 units of excess returns for every unit of risk assumed. Although the company's stock did not achieve as high a ratio as Pershing Square's stock, it managed to generate better returns relative to the risk taken compared to the capital market (S&P 500).

For the *NLB Razvita Evropa Delniški* mutual fund, the Sharpe ratio was barely 0.02 in the considered time period. This is significantly less than the Sharpe ratio for the S&P 500. This mutual fund generated meager risk-adjusted returns compared to other mutual funds and stocks of selected foreign companies. For every unit of risk that the mutual fund assumed, it generated only 0.02 unit of excess return. Considering the low average return, the mutual fund is not attractive for investors.

For the *NLB Globalni Delniški* mutual fund, the Sharpe ratio was 0.17. The same as mutual funds *NLB Razvita Evropa Delniški* and *TRIGLAV Evropa*, the *NLB Globalni Delniški* mutual fund generated lower risk-adjusted returns compared to the S&P 500 index. For each unit of assumed risk, the mutual fund generated 0.17 units of excess return above the risk-free interest rate. Being risk-adjusted, it has underperformed the S&P 500 index. Even considering the modest returns, the findings suggest that the *NLB Globalni Delniški* mutual fund is not the best choice for investors.

The *TRIGLAV Severna Amerika* mutual fund recorded a slightly better Sharpe ratio of 0.31. The mutual fund exceeded the ratio achieved by the S&P 500 index during the period under review. For each unit of risk, the mutual fund generated 0.31 units of excess return. The mutual fund managed to generate relatively good risk-adjusted returns, but it still lagged Pershing Square and Berkshire Hathaway in both the Sharpe ratio and the average return.

The *TRIGLAV Evropa* mutual fund created the worst Sharpe ratio of all mutual funds and companies, which amounted to -0.04. The mutual fund generated negative risk-adjusted returns during the period under review. The *TRIGLAV Evropa* mutual fund, therefore, generated lower returns than the risk-free rate of return (it is a systematic risk).

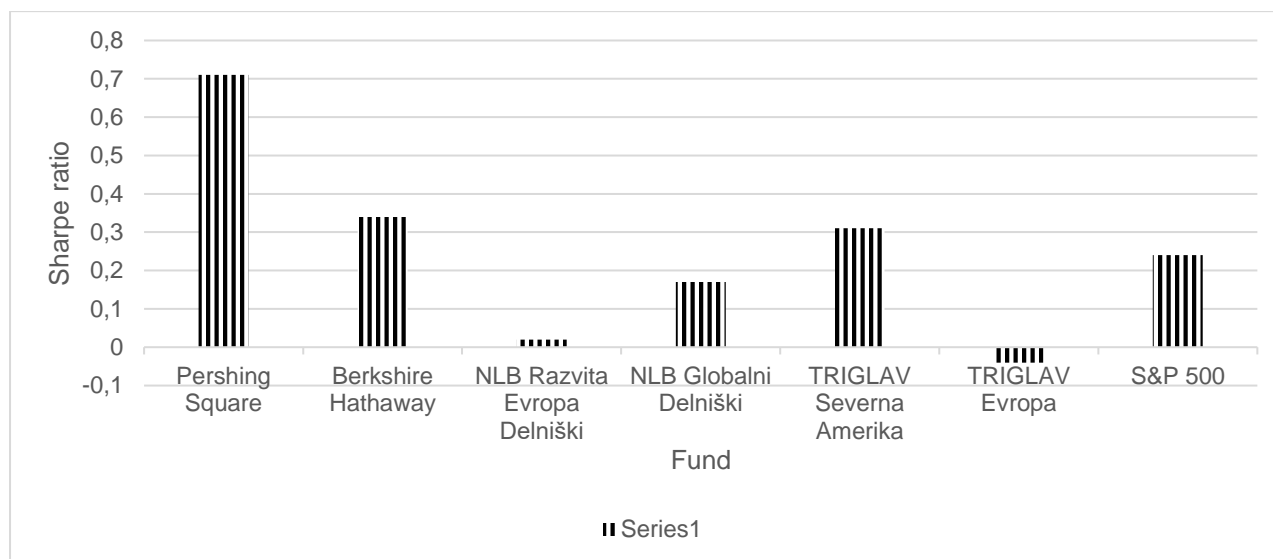
Table 5 shows the Sharpe ratio, which reflects the magnitude of risk and return for selected mutual funds, shares of selected companies and the S&P 500 index.

**Table 5.** Display of the Sharpe ratio for stocks of selected companies, mutual funds and the S&P 500 index in the 2018–2022 period.

Fund, stock, index	Sharpe ratio
Pershing Square	0.71
Berkshire Hathaway	0.34
NLB Razvita Evropa Delniški	0.02
NLB Globalni Delniški	0.17
TRIGLAV Severna Amerika	0.31
TRIGLAV Evropa	-0.04
S&P 500	0.24

Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c, 2023f, 2023g)

Figure 5 visualizes the Sharpe ratios as shown in Table 5 and represents the return-to-risk ratio for selected mutual funds and companies.



**Figure 5.** Display of the Sharpe ratio for stocks of selected companies, mutual funds and the S&P 500 index.

Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c).

In summary, the analysis of the Sharpe ratio for the stocks of the selected companies, mutual funds and the S&P 500 index offered a thorough insight into their return relative to the risk assumed. The differences in ratios showed a clear divide between individual investment strategies of mutual funds and companies. The shares of Pershing Square have been the best performers in terms of achieving risk-adjusted returns, while some mutual funds, such as TRIGLAV Evropa, have shown less favourable results. Different investment management strategies, from more dynamic to more conservative, reflect different risks and returns. From the perspective of an investor seeking the optimal combination of return and risk, this analysis helps identify potential opportunities and pitfalls within available investment options.

### The Monte Carlo Simulation

A Monte Carlo simulation is based on random sampling to generate numerical results and to simulate the range of possible outcomes for an uncertain event. The Monte Carlo simulation results are not completely accurate. The results shown are only simulated and do not exactly represent the predicted results but serve as a tool to evaluate different possible scenarios. Also, a Monte Carlo simulation assumes constant returns, which is not the case in reality (Kenton, 2023).

In our example, we run a Monte Carlo simulation that considers an annual investment of \$6,000 over a period of 40 years (2022–2062). With this input, we model a regular annual investment or payment into an investment or portfolio. In the simulation, we run 10,000 scenarios for each stock of the selected company and unit of the mutual fund in order to evaluate a wide range of potential outcomes. The Monte Carlo simulation results are shown in Table 6.

**Table 6.** Combined Monte Carlo simulation results for selected mutual funds, corporate stocks and the S&P 500 index in \$.

Stock, fund, index / Percentile	5 %	25 %	75 %	95 %
<b>PSH.AS</b>	3,934,025	14,626,639	89,513,017	326,300,383
<b>BRK-A</b>	290,724	761,113	3,041,195	8,812,753
<b>NLB Razvita Evropa Delniški</b>	102,555	191,997	491,570	1,041,253
<b>NLB Globalni Delniški</b>	182,646	357,329	958,234	2,047,977
<b>TRIGLAV Severna Amerika</b>	250,877	644,925	2,578,724	7,260,077
<b>TRIGLAV Evropa</b>	92,492	162,139	385,506	766,662
<b>Index S&amp;P 500</b>	183,454	441,362	1,650,003	4,384,542

Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c, 2023f, 2023g)

The *PSH.AS* stock consistently shows high ranging from \$3,934,025 at the 5<sup>th</sup> percentile to a whopping \$326,300,383 at the 95<sup>th</sup> percentile. The *BRK-A* stock boasts values ranging from \$290,724 at the 5<sup>th</sup> percentile to \$8,812,753 at the 95<sup>th</sup> percentile. Widely recognized as a reflection of the overall health of the US stock market, the *S&P 500* provides values ranging from \$183,454 at the 5<sup>th</sup> percentile to \$4,384,542 at the 95<sup>th</sup> percentile. The *TRIGLAV Severna Amerika* mutual fund shows wide dispersion with final investment values between \$250,877 at the 5<sup>th</sup> percentile and \$7,260,077 at the 95<sup>th</sup> percentile.

On the other side of the spectrum are mutual funds such as *NLB Razvita Evropa Delniški*, *NLB Globalni Delniški* and *TRIGLAV Evropa*, which show a more stable and balanced final value of investments with smaller differences between values at the 5<sup>th</sup> and 95<sup>th</sup> percentile.

The Monte Carlo simulation revealed the dynamics of long-term investments in shares of the selected companies and mutual funds. Namely, those who chose to invest long-term reaped benefits regardless of short-term fluctuations. The long-term approach allowed the capital to develop and grow without exposing the investment to momentary market reactions. The simulation confirms that time and patience are essential factors in building a successful investment portfolio and reinforces the mindset that long-term investment patience often brings more stable and positive results.

The differences in the investment strategy are also perfectly visible. *Pershing Square's* stock showed high investment closing values. The company pursues a more aggressive strategy aimed at seeking high returns, often with greater risk. On the other hand, *Berkshire Hathaway*, known for its conservative strategy focusing on long-term value, showed lower but still high final investment values. Mutual funds *TRIGLAV Evropa*, *NLB Razvita Evropa Delniški* and *NLB Globalni Delniški* showed lower final investment values, which reflects a different approach to the investment strategy.

#### The CAPM Model

The CAPM model (capital asset pricing model) is an idealized representation of how financial markets value securities. They determine the expected returns on capital investments, taking into account the risk measured by the standard deviation. The CAPM model states that the riskier the stock is, the higher its expected return is (Marotta, 2012).

A stock's beta measures the movement of the value of a particular investment compared to the movement of the S&P 500 index (Marotta, 2012). Table 7 shows the results of the CAPM model.

**Table 7.** Display of Beta and CAPM values for selected mutual funds, company shares and the S&P 500 index.

Indicator	PSH.AS	BRK-A	NLB Razvita Evropa Delniški	NLB Globalni Delniški	TRIGLAV Severna Amerika	TRIGLAV Evropa
BETA(β)	0.9700	0.8700	0.6274	0.4631	0.3974	0.5437
CAPM	8.8 %	8.4 %	7.3 %	6.6 %	6.3 %	7 %

Source: NLB Skladi (2023b), Triglav Skladi (2023c), Yahoo Finance (2023c, 2023f).

The beta coefficient (β) for *Pershing Square (PSH.AS)* is 0.97. The return on this company's share moves in line with the return on the capital market, represented in our case by the S&P 500 index. The CAPM model shows the highest expected return among mutual funds and shares, a return of 8.8%.

The displayed expected return is far below the calculated average annual return on the company's stock, which was 21.74% over the last five years. The CAPM model takes into account systematic risk, which is measured by beta, but not non-systematic risk or specific characteristics of investments and their management (Kenton, 2023). The company's stock had a high average standard deviation (27.5%), which is not taken into account by the CAPM model. The exceptionally high average annual return over the past five years may therefore be the result of non-systematic risk and other factors. Consequently, the future return shown by the CAPM model for the *PSH.AS* share may not be the most realistic. Furthermore, the CAPM model assumes that financial markets

are perfectly rational and efficient and therefore all information is immediately and fully incorporated into investment prices (Kenton, 2023). Pershing Square exploits market irrationalities, including the irrational behaviour of other investors, delays in incorporating information into stock prices, and other forms of market inefficiency. Therefore, the CAPM model cannot accurately estimate the future profitability of the PSH.AS share, since the company operates exactly in the way, the CAPM model does not take into account.

The beta coefficient for *Berkshire Hathaway (BRK-A)* is 0.87. Therefore, the return on the share is slightly less sensitive to market movements than the S&P 500 index. According to the CAPM model, we can expect an annual return of 8.4%.

Similar to Pershing Square, Berkshire Hathaway also exploits market irrationalities. The CAPM model does not consider the specifics of Berkshire Hathaway's strategy, so the model cannot be completely reliable and may underestimate expected returns. Berkshire Hathaway's investment policy is also highly diversified. A high degree of diversification in some instances leads to a lower beta value of the company's stock, reducing the expected return on the stock according to the CAPM model (Kenton, 2023).

*NLB Razvita Evropa Delniški* – a mutual fund managed by NLB Skladi – invests mainly in developed Europe, with part of the assets also intended for developing European markets (NLB Skladi, 2023c).

The beta coefficient per unit of mutual fund assets is 0.63, which means that the mutual fund's performance is not that strongly related to the general movement of the market. Using the CAPM model, we can conclude that the expected return could be 7.3%.

*NLB Globalni Delniški* – a mutual fund managed by NLB Skladi – invests globally with a focus on developed markets but occasionally also includes investments in developing markets (NLB Skladi, 2023a).

The mutual fund's historical daily unit prices show a beta value of 0.46. The return of the mutual fund can, therefore, follow the market movement like the S&P 500 index. Based on the CAPM model, the expected return would be 6.6%.

*TRIGLAV Severna Amerika* – a mutual fund managed by Triglav Skladi – invests in the shares of the largest companies in North America (Triglav Skladi, 2023b).

The unit of mutual fund assets has a beta coefficient of 0.40. The return of the mutual fund follows the market movement less than the S&P 500 index. According to the CAPM model, a return of 6.3% could be expected.

*TRIGLAV Evropa* – a mutual fund managed by Triglav Skladi – invests in shares of established European companies (Triglav Skladi, 2023a).

The beta value of the asset unit is 0.54, which indicates that the return of the mutual fund is less sensitive to market movements than the S&P 500 index. According to the CAPM model, we can expect an annual return of 7%.

In conclusion of this subsection, we can write that the CAPM model is useful and effective for understanding risks and returns in the context of systematic market risk. However, its use is best in combination with other tools and analytical approaches that can better include the complexity and dynamics of individual investments. This subsection provides insight into the benefits and limitations of the CAPM model but is also important for understanding the big picture when evaluating investment opportunities.

## Conclusions

In the research, we examined in detail the investment strategies of three globally recognized successful investors, Warren Buffett, Bill Ackman and Chamath Palihapitiya, and compared them with the investment strategies of Slovenian mutual funds and the capital market. We tested four research hypotheses.

Research shows that the ability to monitor and assess a company's intrinsic value can lead to extraordinary returns. Using fundamental analysis, Buffett, Ackman, and Palihapitiya found undervalued companies, invested in them and made money by increasing their market value.

We confirm the first hypothesis *H1: Proper assessment and monitoring of the company's future intrinsic value enables above-average investment returns.*

The financial analysis confirmed the fact that the capital fund's profitability and risk are a reflection of its chosen strategy. It turned out that the ability of Pershing Square and Berkshire Hathaway to achieve above-average returns also partly stems from the acceptance of greater risks, which both companies managed by diversifying their investments. The NLB funds followed more conservative strategies, which is why they generated lower but more stable returns. The Sharpe ratio showed the importance of risk management. Pershing Square and Berkshire Hathaway can accept more risk because they know how to manage it better, while, for example, the NLB funds generate relatively low returns per unit of accepted risk. We confirm the second hypothesis *H2: The fund's profitability and risk are a reflection of its chosen investment strategy.* Funds willing to accept more risk often aim for higher returns, while more conservative funds focus on achieving more stable but lower returns.

Time and patience are extremely important in investing. All three investors are well aware that to achieve truly high returns, it is necessary to take a strategic, long-term view of investments. Such thinking is reflected in their approach of not simply buying stocks but seeing themselves as business owners. They focus on the long-term performance of the company rather than on the short-term market fluctuations, which can lead to more stable and potentially higher returns in the long run. They warn that a short-term view leads to extremely risky speculative investments, which confirms the third hypothesis *H3: The most important factors in investing are time and patience.*

In the financial world, opinions on the accuracy of stock market values remain divided. Some financial experts believe that markets always reflect all available information consistent with the efficient market hypothesis, which states that it is impossible to consistently generate above-average returns. Nevertheless, it should be noted that Buffett, Ackman and Palihapitiya, with their good understanding of individual companies and their excellent knowledge of how the stock market works, managed to identify investment opportunities well. Above-average returns were generated only after a few years until the market recognized the potential and value of these companies. We partially confirm the fourth hypothesis *H4: The stock market does not always reflect the real value of an individual company, so it is important to critically evaluate every decision and not blindly follow market trends.*

At this point, we should also mention the limitations we encountered during the research. These relate mainly to the empirical part. The first limitation stems from the non-random sample size. We limited the research to two large foreign joint-stock companies, whose shares are listed on world stock exchanges, and to a few Slovenian mutual funds. We did not include Slovenian joint-stock companies, such as the so-called blue chips, and we did not consider all Slovenian mutual funds, such as the Generali Investments mutual fund. The research could cover a longer period, e.g. a 10-year period. We also point out the limitation of access to complete information regarding the presented strategies and the possible bias in the interpretation of their performance. Additional limitations include the lack of quantitative analysis that could better quantify the effectiveness of the strategies, while time constraints prevent a full assessment of the long-term performance and sustainability of these strategies. We also emphasize that our analysis of returns and risks does not cover all relevant factors, such as macroeconomic, regulatory conditions and taxation. We must definitely take these limitations into account when interpreting the presented findings of our research.

It would be useful to include other well-known investors in future research. It would be interesting to include investors with different views and approaches to making their investment decisions and to examine how their strategies perform in different market conditions.

It would also make sense to analyze the reasons why Slovenian mutual funds do not achieve returns that would be closer to the returns of the investors that we present in this paper. The goal would be to determine whether there are specific market or regulatory factors that, with their limitations, affect the profitability of Slovenian mutual funds. The research could also include an analysis of investment approaches used by Slovenian mutual funds.

## References

- Bernanke, B.S., & Reinhart, V.R. (2004). Conducting monetary policy at very low short-term interest rates. *American Economic Review*, 94(2), 85-90. <https://doi.org/10.1257/0002828041302118>
- Binswanger, M. (2000). Stock market booms and real economic activity: Is this time different? *International Review of Economics & Finance*, 9(4), 387-415. [https://doi.org/10.1016/S1059-0560\(99\)00056-8](https://doi.org/10.1016/S1059-0560(99)00056-8)
- Bhatia, H. (2022). Top ten Essential Factors Determining the Return on Investment. Sustvest (formerly SolarGridX), Gurugram, Haryana, India.
- Buffett, W.E. (1985). Berkshire Hathaway Inc. <https://www.berkshirehathaway.com/letters/1984.html>
- Buffett, W.E. (2013). Berkshire Hathaway Inc. <https://www.berkshirehathaway.com/letters/2012ltr.pdf>
- Buffett, W.E. (2014). Shareholder Letter. <https://www.berkshirehathaway.com/letters/2013ltr.pdf>
- Bukvič, V. (2016). Value based management with some practical examples in Slovenian industries. *Advances in Business Related Scientific Research Journal*, 7(2), 40-79
- Bukvič, V. (2024). Strateške investicije v luči njihove dinamike in financiranja: primer slovenskih podjetij v obdobju 2010 do 2017 = Strategic investments in the light of their dynamic and financing: an example of Slovenian companies in the period from 2010 to 2017. *Poslovodno računovodstvo*. [Spletna izd.], 17(1), 153-218.
- Canadian Pacific. (2012). Canadian Pacific Annual Report 2011. [https://s21.q4cdn.com/736796105/files/doc\\_financials/Annual-Report/2011/cp-ar-2011.pdf](https://s21.q4cdn.com/736796105/files/doc_financials/Annual-Report/2011/cp-ar-2011.pdf)
- Chowdhury, E.K., Khan, I.I., & Dhar, B.K. (2022). Catastrophic impact of Covid-19 on the global stock markets and economic activities. *Business and Society Review*, 127(2), 437-460. <https://doi.org/10.1111/basr.12219>
- Dallas, L.L., Bainbridge, S.M. in Bohinc, R. (2001). Direktorski odbor in delničarski aktivizem v ZDA in Sloveniji. Ljubljana: Fakulteta za družbene vede.
- Dawson, J.W., & Seater, J.J. (2013). Federal regulation and aggregate economic growth. *Journal of Economic Growth*, 18, 137-177. <https://doi.org/10.1007/s10887-013-9088-y>
- Dinner, J. (2023). Who is Virgin Galactic and what do they do? <https://www.space.com/18993-virgin-galactic.html>
- Downey, L. (2023). Efficient Market Hypothesis (EMH): Definition and Critique. <https://www.investopedia.com/terms/e/efficientmarkethypothesis.asp>
- Dure, E. (2023). Chamath Palihapitiya: Early Life, Education, Personal Life. <https://www.investopedia.com/who-is-chamath-palihapitiya-5105271>
- Eldomiaty, T., Saeed, Y., Hammam, R., & AboulSoud, S. (2020). The associations between stock prices, inflation rates, interest rates are still persistent: Empirical evidence from stock duration model. *Journal of Economics, Finance and Administrative Science*, 25(49), 149-161. <https://doi.org/10.1108/JEFAS-10-2018-0105>
- Fama, E.F. (1970). Efficient capital markets. *Journal of Finance*, 25(2), 383-417. <https://doi.org/10.2307/2325486>
- Fama, E. F. (1990). Stock returns, expected returns, and real activity. *The Journal of Finance*, 45(4), 1089-1108. <https://doi.org/10.1111/j.1540-6261.1990.tb02428.x>

Fernando, J. (2023). Sharpe Ratio: Definition, Formula, and Examples. Acquired from <https://www.investopedia.com/terms/s/sharperatio.asp>

Goff, B. L. (1996). Regulation and macroeconomic performance. *Science & Business Media*. <https://doi.org/10.1007/978-1-4613-1343-4>

Greenblatt, J. (2010). *The Little Book That Still Beats the Market*. New Jersey: John Wiley & Sons.

Greenslade, R. (2014). Warren Buffett says farewell to the Washington Post in £737m sell-off deal. <https://www.theguardian.com/media/greenslade/2014/mar/13/washington-postwarrenbuffett#:~:text=9%20years%20old,Warren%20Buffett%20says%20farewell%20to%20the%20Washington,%C2%A3737m%20sell%20off%20deal&text=Warren%20Buffett%20is%20to%20end,Holdings%2C%20the%20>

Hagstrom, R.G. (1999). *The Warren Buffett Portfolio: Mastering the Power of the Focus Investment Strategy*. New Jersey: John Wiley & Sons.

Hagstrom, R.G. (2014). *The Warren Buffett Way* (3rd ed.). New Jersey: John Wiley & Sons.

Hahn, R. W., & Hird, J. A. (1991). The costs and benefits of regulation: Review and synthesis. *Yale J. on Reg.*, 8, 233.

Hargrave, M. (2023). Standard Deviation Formula and Uses vs. Variance. <https://www.investopedia.com/terms/s/standarddeviation.asp>

Ilmanen, A., Maloney, T., & Ross, A. (2014). Exploring Macroeconomic Sensitivities: How Investments Respond to Different Economic Environments. *The Journal of Portfolio Management*, 40(3), 87-99. <https://doi.org/10.3905/jpm.2014.40.3.087>

Ince, B., & Ozsoylev, H. (2024). Price of Regulations: Regulatory Costs and the Cross-section of Stock Returns. *The Review of Asset Pricing Studies*, 14(3), 381-427. <https://doi.org/10.1093/rapstu/raec001>

Israel, R., Laursen, K., & Richardson, S. A. (2020). Is (systematic) value investing dead? *Journal of Portfolio Management*. <https://doi.org/10.3905/jpm.2020.1.194>

Jeffers, J., Lyu, T., & Posenau, K. (2024). The Risk and Return of Impact Investing Funds. *Journal of Financial Economics*, 161. <https://doi.org/10.1016/j.jfineco.2024.103928>

Kenton, W. (2023). Capital Asset Pricing Model (CAPM) and Assumptions Explained. <https://www.investopedia.com/terms/c/capm.asp>

Klarman, S.A. (1999). Why Value Investors Are Different. <https://www.barrons.com/articles/SB918877044971819500>

Litner, J. (1965). Security Price, Risk, and Maximal Gains from Diversification. *Journal of Finance*, 20(4), 587-615. <https://doi.org/10.1111/j.1540-6261.1965.tb02930.x>

Malkiel, B.G. (2003). The efficient market hypothesis and its critics. *Journal of Economic Perspectives*, 17(1), 59-82. <https://doi.org/10.1257/089533003321164958>

Markowitz, H. (1952). Portfolio selection. *The Journal of Finance*, 12(7), 77-91. <https://doi.org/10.1111/j.1540-6261.1952.tb01525.x>

Marotta, D. J. (2012). CAPM: The First Factor of Investing. <https://seekingalpha.com/article/444721-capm-the-first-factor-of-investing>

Mulyadi, M., Zulkifli, Z., & Widyastuti, T. (2023). Analysis of Factors Affecting Investment Decisions and its Implications on Organizational Performance. *Interdisciplinary Journal and Hummanity (INJURITY)*, 2(9), 784-794. <https://doi.org/10.58631/injury.v2i9.111>

Mutswenje, V.S. (2009). A survey of the factors influencing investment decisions: the case of individual investors at the NSE. Thesis. University of Nairobi. <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13223>

NLB Skladi. (2023a). NLB Skladi: Globalni delniški. <https://www.nlbskladi.si/skladi/podskladi/globalni-delniski#investirana-lozba-delnice>

NLB Skladi. (2023b). Podskladi krovnega sklada NLB Skladi. <https://www.nlbskladi.si/skladi/podskladi>

NLB Skladi. (2023c). Razvita Evropa delniški. <https://www.nlbskladi.si/skladi/podskladi/razvita-evropa-delniski>

Özlen, S., & Ergun, U. (2012). Macroeconomic factors and stock returns. *International Journal of Academic Research in Business and Social Sciences*, 2(9), 315.

Peternel, E. (2023). Naložbene strategije nekaterih najuspešnejših vlagateljev svetovnih borz in primerjava njihove donosnosti s slovenskimi skladi [Diplomsko delo, E. Peternel]. Repozitorij samostojnih visokošolskih in višješolskih izobraževalnih organizacij. <https://revis.openscience.si/IzpisGradiva.php?lang=slv&id=9948>

Quanloop Team (2021). Three main factors may cause ROI to fluctuate and what you can do to stabilise it.

Renju, R.V., & Biju, R.M. (2023). Study of the sentimental influence on Indian stock price. *Heliyon*, 9(12). <https://doi.org/10.1016/j.heliyon.2023.e22788>

Sellin, P. (2001). Monetary policy and the stock market: theory and empirical evidence. *Journal of Economic Surveys*, 15(4), 491-541. <https://doi.org/10.1111/1467-6419.00147>

Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The Journal of Finance*, 19(3), 425-442. <https://doi.org/10.1111/j.1540-6261.1964.tb02865.x>

Sheetz, M. (2021). Virgin Galactic drops 10% after chairman Chamath Palihapitiya dumps his \$213 million personal stake. Acquired from <https://www.cnbc.com/2021/03/05/chamath-palihapitiya-sells-virgin-galactic-spce-stake.html>

Tenorio, E.M. (2021). Bill Ackman's biography: What is his investment style? Acquired from <https://www.bbva.ch/en/news/bill-ackmans-biography-what-is-his-investment-style/>

Thakur, M. (2023). Annual Return Formula. Acquired from <https://www.educba.com/annual-return-formula/>

The Global Fund (2018). Risk Appetite Framework. Board Approved GP/B39/DP11.

Triglav Skladi. (2023a). Triglav Evropa. <https://www.triglavskladi.si/poskrbite-za-svoje-premozenje/nalozbeni-skladi/triglav-evropa/>

Triglav Skladi. (2023b). Triglav Severna Amerika. <https://www.triglavskladi.si/poskrbite-za-svoje-premozenje/nalozbeni-skladi/triglav-severna-amerika/>

Triglav Skladi. (2023c). Vzajemni skladi in naložbene kombinacije. <https://www.triglavskladi.si/poskrbite-za-svoje-premozenje/nalozbeni-skladi/>

United States Securities and Exchange Commission (USSEC). (2019). Form 10-K: Annual report pursuant to section 13 or 15(d) of the securities and exchange act of 1934: general instructions. <https://www.sec.gov/files/form10-k.pdf>

Uzma, B., Fiaz, A.S., Naveed ul. H., & Bilal, A. (2024). Impact of allied factors on investment performance, mediating role of investment decision: evidence from investors in Lahore. School of Accounting & Finance, University of Lahore <https://www.researchgate.net/publication/377159189>

Virgin Galactic. (2019). Virgin Galactic completes merger with Social Capital Hedosophia, creating the world's first and only publicly traded commercial human spaceflight company. Acquired from <https://investors.virgingalactic.com/news/news-details/2019/Virgin-Galactic-Completes-Merger-with-Social-Capital-Hedosophia-Creating-the-Worlds-First-and-Only-Publicly-Traded-Commercial-Human-Spaceflight-Company/default.aspx>

Virgin Galactic. (2022a). Virgin Galactic announces board changes. Acquired from <https://investors.virgingalactic.com/news/news-details/2022/Virgin-Galactic-Announces-BoardChanges/default.aspx>

Virgin Galactic. (2022b). Virgin Galactic Holdings Inc. (SPCE) Q4 2021 – earnings call transcript. <https://news.alphastreet.com/virgin-galactic-holdings-inc-spce-q4-2021-earnings-call-transcript/>

Virgin Galactic. (2023). Virgin Galactic announces first quarter 2023 financial results and provides business update. <https://investors.virgingalactic.com/news/news-details/2023/Virgin-Galactic-Announces-First-Quarter-2023-Financial-Results-And-Provides-Business-Update/default.aspx>

Yahoo Finance. (2023a). Berkshire Hathaway Inc. (BRK-A). <https://finance.yahoo.com/quote/BRK-A?p=BRK-A>

Yahoo Finance. (2023b). Pershing Square Holdings, Ltd. (PSH.AS). <https://finance.yahoo.com/quote/PSH.AS?p=PSH.AS&.tsrc=fin-srch>

Yahoo Finance. (2023c). SPDR S&P 500 ETF Trust (SPY). <https://finance.yahoo.com/quote/SPY?p=SPY&.tsrc=fin-srch>

**Author Contributions:** The authors contributed equally. All authors have read and agreed to the published version of the manuscript.

**Ema PETERNEL**

ORCID ID: <https://orcid.org/0009-0004-0447-2221>

**Vladimir BUKVIČ**

ORCID ID: <https://orcid.org/0000-0003-1330-9720>

---

Copyright © 2024 by author(s) and VSI Entrepreneurship and Sustainability Center  
This work is licensed under the Creative Commons Attribution International License (CC BY).  
<http://creativecommons.org/licenses/by/4.0/>

